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Page 2 (Amendment Under 37 C.F.R. § 1.116 - November 20, 1998)



**AMEND THE ABOVE-IDENTIFIED APPLICATION AS FOLLOWS:**

**In The Specification:**

Page 53, line 22, after "ribonucleotide. The" and before "vicinal"  
change "3', 4'" to -- 3', 2' -- .

**In The Claims:**

Cancel claims 310-372 and 405-453.

Add new claims 454-573 as follows:

-- 454. (NEW) An oligo- or polydeoxyribonucleotide comprising at least one nucleotide having the formula

Sig - PM - SM - BASE

wherein PM is a phosphate moiety, SM is a sugar moiety and BASE is a moiety selected from the group consisting of a pyrimidine, a purine and a deazapurine, or analog thereof, said PM being attached to SM, said BASE being attached to SM, and Sig being covalently attached to PM directly or via a chemical linkage, said Sig being a moiety capable of non-radioactive detection when attached to PM or when said nucleotide is incorporated into said oligo- or polydeoxyribonucleotide. --

-- 455. (NEW) The oligo- or polydeoxyribonucleotide of claim 454, wherein said Sig is or renders the nucleotide self-signaling or self-indicating or self-detecting. --

-- 456. (NEW) The oligo- or polydeoxyribonucleotide of claim 454, wherein said Sig moiety comprises at least three carbon atoms. --